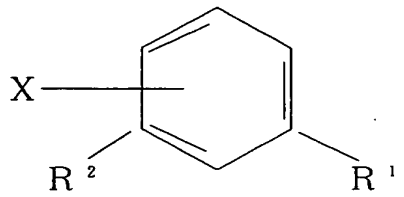
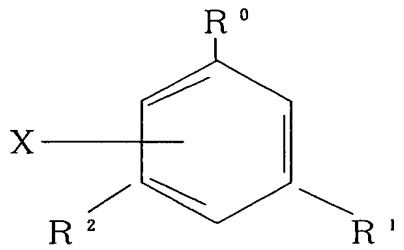
CLAIMS

1. A process for producing an alkyl aromatic compound represented by the general formula (2), characterized in that an aromatic compound represented by the general formula (1) is alkylated with an olefin having 2 to 4 carbon atoms in the presence of a Broensted acid, and in that the resulting mixture is subsequently added with a Lewis acid and is subjected to isomerization in the copresence of the Broensted acid and the Lewis acid.



(1)



(2)

wherein R^1 and R^2 each independently represent an alkyl group, a perfluoroalkyl group, a halogen atom, a nitro group or an alkyloxy or aryloxy group which may have a substituent, X represents a hydrogen atom, an alkyl group, an aryl group, a perfluoroalkyl group, a halogen atom, a nitro group or an alkyloxy or aryloxy group which may have a substituent, or X may be taken in combination with one or both of the adjacent groups R^1 and R^2 to represent a cycling structure which may have a substituent, and R^0 represents an ethyl group, an isopropyl group, a sec-butyl group or a tert-butyl group.

2. A process for producing an alkyl aromatic compound as recited in claim 1, wherein the reaction of the aromatic compound represented by the general formula (1) with the olefin in the presence of a Broensted acid is performed with

a molar ratio of the Broensted acid to the aromatic compound being 1 or more.

3. A process for producing an alkyl aromatic compound as recited in claim 1 or 2, wherein the reaction of the aromatic compound represented by the general formula (1) with the olefin in the presence of a Broensted acid is performed at a temperature lower than 50°C but not lower than -30°C.

4. A process for producing an alkyl aromatic compound as recited in any one of claims 1 through 3, wherein the isomerization in the copresence of the Lewis acid and the Broensted acid after the reaction of the aromatic compound represented by the general formula (1) with the olefin in the presence of a Broensted acid is performed with a molar ratio of the Lewis acid to the aromatic compound represented by the general formula (1) being 0.5 or more.

5. A process for producing an alkyl aromatic compound as recited in any one of claims 1 through 4, wherein the isomerization in the copresence of the Lewis acid and the Broensted acid after the reaction of the aromatic compound represented by the general formula (1) with the olefin in the presence of a Broensted acid is performed at a temperature lower than 50°C but not lower than -30°C.

6. A process for producing an alkyl aromatic compound as recited in any one of claims 1 through 5, wherein the Broensted acid is HF and the Lewis acid is BF_3.

7. A process for producing an alkyl aromatic compound as recited in any one of claims 1 through 6, wherein the olefin having 2 to 4 carbon atoms is selected from the group consisting of ethylene, propylene, butylenes and isobutylene.

8. A process for producing an alkyl aromatic compound as recited in any one of claims 1 through 7, wherein R^1 and R^2 are each a methyl group and X is a hydrogen atom in the

general formulas (1) and (2), and wherein R^0 is an isopropyl group in the general formula (2).